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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO.       |
|--|-------------|----------------------|-----------------------------|------------------------|
| 10/774,734   | 02/09/2004  | Wataru Ishikawa      | KOY-17                      | 9212                   |
| 20311  | 7590        | 01/14/2008           |                             |                        |
| LUCAS & MERCANTI, LLP<br>475 PARK AVENUE SOUTH<br>15TH FLOOR<br>NEW YORK, NY 10016 |             |                      | EXAMINER<br>MARTIN, LAURA E |                        |
|  |             |                      | ART UNIT<br>2853            | PAPER NUMBER           |
|  |             |                      | MAIL DATE<br>01/14/2008     | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/774,734

Applicant(s)

ISHIKAWA, WATARU

Examiner

Laura E. Martin

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11/28/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5 and 7-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5 and 7-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Claim Objections***

Claims 2 and 5 objected to because of the following informalities: "ionic surfactant is fluorine system surfactant" should be "ionic surfactant is a fluorine system surfactant". Appropriate correction is required.

Claims 2 and 5 objected to because of the following informalities: "organic solvent" should be "an organic solvent". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 8, 10, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samaranayake (US 6743514 B1) in view of Ushirogouchi et al. (US 2003/0231234 A1).

**Samaranayake discloses the following claim limitations:**

As per claims 1 and 4: an ink comprising a light curable type aqueous resin composition comprising a polymerizable compound (column 2, lines 15-25) which polymerizes with radical polymerization by water (claim 1 – there is water in the ink) and active ray, an aqueous photo polymerization initiator (column 6, lines 44-57) which generates free radicals by active ray, and a non-ionic surfactant (column 5, lines 42-62), which is jetted onto a recording material by a recording head of an ink jet printer (column 1, lines 5-12) and is subsequently cured by irradiation of active ray (claims 13 and 16).

**Samaranayake does not disclose the following claim limitations:**

As per claims 1 and 4: the non-ionic surfactant having a content of 10 to 10000 ppm and a printhead having nozzles.

As per claims 8 and 10: printed matter which is produced by jetting the active ray curable ink onto an absorbent recording material.

As per claims 15 and 16: the content of the non-ionic surfactant is 20 to 1000 ppm.

**Ushirogouchi et al. disclose the following claim limitations:**

As per claims 1 and 4: the non-ionic surfactant having a content of 10 to 10000 ppm [0241] and a printhead having nozzles [0094].

As per claims 8 and 10: printed matter which is produced by jetting the active ray curable ink onto an absorbent recording material [0014].

As per claims 15 and 16: the content of the non-ionic surfactant is 20 to 1000 ppm [0241].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink taught by Samaranayake with the disclosure of Ushirogouchi et al. in order to create a high quality print. It is also well known in the art to use different amounts of surfactants. It is also well known in the art that ink jet printheads have nozzles with which to eject ink onto an absorbent medium.

Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samaranayake (US 6743514 B1) and Ushirogouchi et al. (US 2003/0231234 A1), and further in view of Owatari et al. (US 6095645 A).

**Samaranayake as modified disclose the following claim limitations:**

As per claims 2 and 5: the ink taught in claims 1 and 4.

**Samaranayake as modified do not disclose the following claim limitations:**

As per claims 2 and 5: a non-ionic surfactant is a fluorine system surfactant comprising of a perfluoroalkyl group in a molecule.

**Owatari et al. disclose the following claim limitations:**

As per claims 2 and 5: a non-ionic surfactant is a fluorine system surfactant comprising of a perfluoroalkyl group in a molecule (column 3, line 64).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink taught by Samaranayake as modified with the disclosure of Owatari et al. in order to provide a stable ink composition with good print quality.

Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samaranayake (US 6743514 B1) and Ushirogouchi et al. (US 2003/0231234 A1), and further in view of Noguchi et al. (US 2002/0065335 A1).

**Samaranayake as modified disclose the following claim limitations:**

As per claims 7 and 9: the ink taught in claims 1 and 4.

**Samaranayake as modified do not disclose the following claim limitations:**

As per claims 7 and 9: jetting onto an unabsorbent recording material.

**Noguchi et al. disclose the following claim limitations:**

As per claims 7 and 9: jetting onto an unabsorbent recording material [0012].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink taught by Samaranayake as modified with the disclosure of Noguchi et al. in order to produce a high-quality image. Also, it is well known in the art to use different types of print medium.

Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samaranayake (US 6743514 B1) and Ushirogouchi et al. (US 2003/0231234 A1), and further in view of Yoshihiro et al. (US 2002/0067394 A1).

**Samaranayake as modified disclose the following claim limitations:**

As per claims 11-14: the ink taught in claims 1 and 4.

**Samaranayake as modified do not disclose the following claim limitations:**

As per claims 11 and 12: an organic solvent in an amount of 0 to 5%.

As per claims 13 and 14: an organic solvent in an amount of 0 to 3%.

**Yoshihiro et al. disclose the following claim limitations:**

As per claims 11 and 12: an organic solvent in an amount of 0 to 5% [0051].

As per claims 13 and 14: an organic solvent in an amount of 0 to 3% [0051].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink taught by Samaranayake with the disclosure of Yoshihiro et al. in order to create a high quality printed image with uniform dot diameter. It is also well known in the art to use different amounts of organic solvents.

***Response to Arguments***

Applicant's arguments with respect to claims 1, 2, 4, 5, and 7-16 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



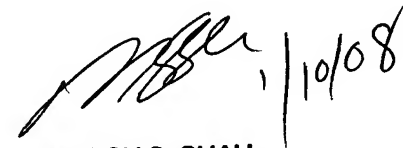
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Laura E. Martin



MANISH S. SHAH  
PRIMARY EXAMINER